



UNITED STATES DEPARTMENT OF COMMERCE
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NOTICE OF ALLOWANCE AND FEE(S) DUE

24033

7590

12/13/2002

KONRAD RAYNES VICTOR & MANN, LLP 315 SOUTH BEVERLY DRIVE SUITE 210 BEVERLY HILLS, CA 90212 EXAMINER

NGUYEN, TUAN H

ART UNIT CLASS-SUBCLASS

438-238000

2813

DATE MAILED: 12/13/2002

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/759,915	01/13/2001	Hiroaki Tsugane	15.30/5630	2811

TITLE OF INVENTION: SEMICONDUCTOR DEVICES AND METHODS FOR MANUFACTURING THE SAME

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1280	\$300	\$1580	03/13/2003

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED</u>, THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.

Applicant claims SMALL ENTITY status.
 See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.



PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Box ISSUE FEE

Commissioner for Patents Washington, D.C. 20231 (703)746-4000 Fax Pax

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

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CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up	with any corrections or use Block 1)

24033

7590

12/13/2002

KONRAD RAYNES VICTOR & MANN, LLP 315 SOUTH BEVERLY DRIVE SUITE 210 **BEVERLY HILLS, CA 90212**

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Box Issue Fee address above, or being facsimile transmitted to the USPTO, on the date indicated below.

	dansinitied to the OSI 10, on the date mareage con-
(Depositor's name)	•
(Signature)	
(Date)	

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/759 915	01/13/2001	Hiroaki Tsugane	15.30/5630	2811

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APPLN, TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE	
nonprovisional	NO	\$1280	\$300	\$1580	03/13/2003	
EXAMINER		ART UNIT	CLASS-SUBCLASS			
NGUYEN, TUAN H 2813		2813	438-238000			
been previously submitted to the USPTO or is being submitted under separate			2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. E PATENT (print or type) will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has te cover. Completion of this form is NOT a substitute for filing an assignment. ESIDENCE: (CITY and STATE OR COUNTRY)			
Please check the appropriat				dual Corporation or other priva	ate group entity government	
4a. The following fee(s) are	enclosed:	•	ment of Fee(s):			
☐ Issue Fee			eck in the amount of the fee(s) nent by credit card. Form PTO			
Publication Fee					or credit any overnayment, to	
☐ Advance Order - # of 0	Copies	Deposit	Commissioner is hereby authorized by charge the required fee(s), or credit any overpaym it Account Number(enclose an extra copy of this form).			
Commissioner for Patents i	s requested to apply the Iss	ue Fee and Publication Fe	e (if any) or to re-apply any p	reviously paid issue fee to the app	lication identified above.	
(Authorized Signature)		(Date)				
other than the applicant; interest as shown by the r This collection of inform obtain or retain a benefit application. Confidentiali estimated to take 12 min completed application for case. Any comments or suggestions for reducing Patent and Trademark Of NOT SEND FEES OIL	and Publication Fee (if requia registered attorney or ecords of the United States attorned in the United States attorned by 37 Cluby the public which is to the Use of the Use o	agent; or the assignee of Patent and Trademark Of R 1.311. The information is file (and by the USPTC 1.12 and 37 CFR 1.14. To gathering, preparing, and will vary depending upon require to complete the to the Chief Informatic Computers Washington I	n is required to to process) an his collection is the submitting the the individual his form and/or on Officer, U.S. D.C. 2023 1. DO			



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

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09/759,915 01/13/2001		Hiroaki Tsugane	15.30/5630	2811	
24033 7590 12/13/2002		ſ	EXAMINER		
KONRAD RAY	NES VICTOR & MA	NN, LLP	NGUYEN, TUAN H		
315 SOUTH BEV SUITE 210	EKLY DRIVE	[ART UNIT	PAPER NUMBER	
BEVERLY HILL	S, CA 90212		2813		
		1	DATE MAILED: 12/13/2002		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The patent term adjustment to date is 0 days. If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the term adjustment will be 0 days.

If a continued prosecution application (CPA) was filed in the above-identified application, the filing date that determines patent term adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system. (http://pair.uspto.gov)

Any questions regarding the patent term extension or adjustment determination should be directed to the Office of Patent Legal Administration at (703)305-1383.





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09/759,915	01/13/2001	Hiroaki Tsugane	15.30/5630	2811
24033	7590 12/13/2002		EXAMIN	ER
	YNES VICTOR & M	ANN, LLP	NGUYEN, T	UAN H
315 SOUTH BI SUITE 210	EVERLY DRIVE		ART UNIT	PAPER NUMBER
BEVERLY HIL	•		2813	
UNITED STAT	ES		DATE MAILED: 12/13/2002	

Notice of Fee Increase on January 1, 2003

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after January 1, 2003, then the amount due will be higher than that set forth in the "Notice of Allowance and Fee(s) Due" since there will be an increase in fees effective on January 1, 2003. See Revision of Patent and Trademark Fees for Fiscal Year 2003; Final Rule, 67 Fed. Reg. 70847, 70849 (November 27, 2002).

The current fee schedule is accessible from: http://www.uspto.gov/main/howtofees.htm.

If the issue fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due," but not the correct amount in view of the fee increase, a "Notice to Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processing delays associated with mailing of a "Notice to Pay Balance of Issue Fee," if the response to the Notice of Allowance and Fee(s) due form is to be filed on or after January 1, 2003 (or mailed with a certificate of mailing on or after January 1, 2003), the issue fee paid should be the fee that is required at the time the fee is paid. If the issue fee was previously paid, and the response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to the issue fee now due, then the difference between the issue fee amount at the time the response is filed and the previously paid issue fee should be paid. See Manual of Patent Examining Procedure, Section 1308.01 (Eighth Edition, August 2001).

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

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	Application No.	Applicant(s)	
AL 41 CAH L. 114	09/759,915	TSUGANE ET AL.	
Notice of Allowability	Examiner	Art Unit	
	Tuan H. Nguyen	2813	
Th MAILING DATE of this communication All claims being allowable, PROSECUTION ON THE MERIT nerewith (or previously mailed), a Notice of Allowance (PTO NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATE of the Office or upon petition by the applicant. See 37 CFR	TS IS (OR REMAINS) CLOSED in L-85) or other appropriate commu NT RIGHTS. This application is s	this application. If not include nication will be mailed in due	ed course. THIS
1. $igtimes$ This communication is responsive to <u>Amendment da</u>	ted 11/19/02.		
2. The allowed claim(s) is/are 1-4 and 15-26.			
 The drawings filed on <u>13 January 2001</u> are accepted Acknowledgment is made of a claim for foreign priori a) ☑ All b) ☐ Some* c) ☐ None of the: 		(f) .	
1. ⊠ Certified copies of the priority documents	s have been received.		
2. Certified copies of the priority documents		n No	
3. Copies of the certified copies of the prior			tion from the
International Bureau (PCT Rule 17.2(
* Certified copies not received:			
5. Acknowledgment is made of a claim for domestic price	ority under 35 U.S.C. § 119(e) (to	a provisional application).	
(a) \square The translation of the foreign language provisi			
6. Acknowledgment is made of a claim for domestic price.	ority under 35 U.S.C. §§ 120 and/o	or 121.	
Applicant has THREE MONTHS FROM THE "MAILING DA below. Failure to timely comply will result in ABANDONME	TE" of this communication to file a NT of this application. THIS THR	reply complying with the requ EE-MONTH PERIOD IS NOT	irements noted EXTENDABLE.
7. A SUBSTITUTE OATH OR DECLARATION must be INFORMAL PATENT APPLICATION (PTO-152) which give			NOTICE OF
 CORRECTED DRAWINGS must be submitted. (a) ☐ including changes required by the Notice of Dra 1) ☐ hereto or 2) ☐ to Paper No 	ftsperson's Patent Drawing Revie	w (PTO-948) attached	
(b) ☐ including changes required by the proposed dra	wing correction filed which	th has been approved by the l	Examiner.
(c) ☐ including changes required by the proposed and			
Identifying indicia such as the application number (see 37 of each sheet. The drawings should be filed as a separate	CFR 1.84(c)) should be written on t	ne drawings in the top margin (not the back)
9. DEPOSIT OF and/or INFORMATION about the attached Examiner's comment regarding REQUIREMENT f	deposit of BIOLOGICAL MATE FOR THE DEPOSIT OF BIOLOGI	ERIAL must be submitted. I CAL MATERIAL.	Note the
Attachment(s)			
1 Notice of References Cited (PTO-892) 3 Notice of Draftperson's Patent Drawing Review (PTO-9		f Informal Patent Application (v Summary (PTO-413), Paper	

U.S. Patent and Trademark Office PTO-37 (Rev. 04-01)

of Biological Material

7☐ Examiner's Comment Regarding Requirement for Deposit

5 Information Disclosure Statements (PTO-1449), Paper No. ___

6 Examiner's Amendment/Comment

9 Other

8⊠ Examiner's Statement of Reasons for Allowance

Application/Control Number: 09/759,915

Art Unit: 2813

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance: None of the references of record teaches or suggests the claimed method for forming a semiconductor device including the steps of simultaneously forming a bit line and a connection layer; simultaneously forming a storage node of the cell capacitor and the lower electrode of the capacitor element; simultaneously forming a dielectric layer of the cell capacitor and the capacitor element; and simultaneously forming a cell plate of the cell capacitor and an upper electrode of the capacitor element.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan H. Nguyen whose telephone number is 703-308-2550. The examiner can normally be reached on 9AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Whitehead Jr. can be reached on 703-308-4940. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Tuan H. Nguyen Primary Examiner

Art Unit 2813

TN

December 12, 2002